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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,588	07/28/2003	Jeffrey K. Drogue	6970.02	4659

7590 08/22/2005

David E. Bruhn
DORSEY & WHITNEY LLP
Intellectual Property Department
50 South Sixth Street, Suite 1500
Minneapolis, MN 55402-1498

EXAMINER	
BOGART, MICHAEL G	
ART UNIT	**PAPER NUMBER**
3761	

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/628,588	DROGUE ET AL.	
	Examiner	Art Unit	
	Michael G. Bogart	3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *19 and 20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *28 July 2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restriction

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

I. Claims 1-18, drawn to a vacuum system and a connector used therewith, classified in class 604, subclass 317.

II. Claims 19 and 20, drawn to a method of calculating liquid information, classified in class 95, subclass 1.

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the method of calculating liquid information can be accomplished with a structural different vacuum system.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with David Braun on 08 August 2005 a provisional election was made without traverse to prosecute the invention of I, claims 1-18. Affirmation of this election must be made by applicant in replying to this Office action. Claims 19 and 20 are withdrawn from further consideration by the examiner, 37 CFR § 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5-7 and 10-12 are rejected under 35 U.S.C. § 102(b) as being anticipated by Paul (US 5,264,026 A).

Regarding claim 1, Paul teaches a vacuum connector comprising an inlet (62), an outlet (68), a separation chamber (12) in communication with the inlet (62), an air pathway (62, 12, 68) in communication with the separation chamber (12) and the outlet (68), and a fluid pathway (22) separate from the air pathway (62, 12, 68), and in communication with the separation chamber (12) and outlet (68)(see figure 2, below).

Regarding claims 3 and 5, Paul teaches a bioaerosol inlet (20) separate from, and in communication with the outlet (68). The chamber (12) combined with disinfectant inlets (20) serves as a decontamination unit.

Regarding claim 6, Paul teaches a collection chamber (18)

Regarding claim 7, Paul teaches a vacuum regulator (44, 46)(figure 4).

Regarding claim 10, Paul teaches a vacuum source (16).

regarding claim 11, see figure 2, below.

Regarding claim 12, Paul teaches a filter (18).

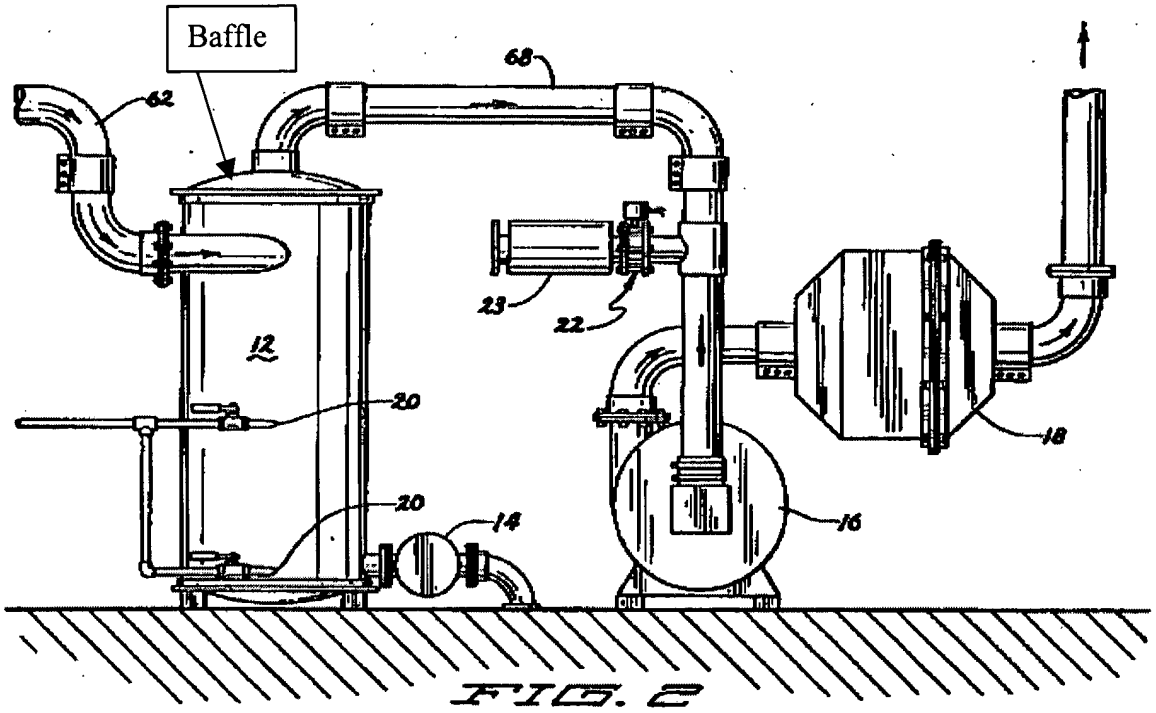


FIG. 2

Claim rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

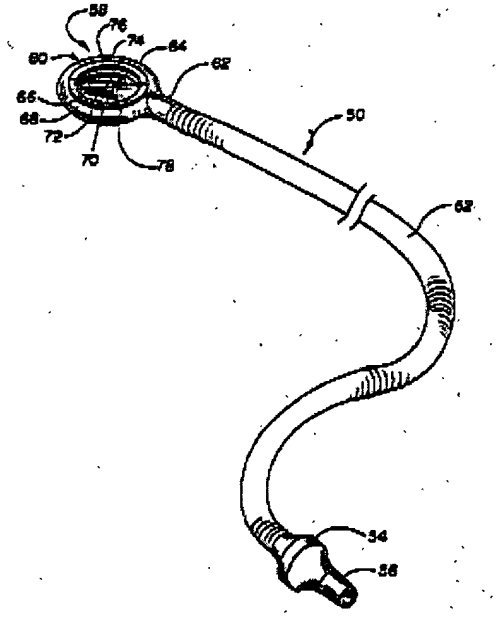
This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(e), (f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 9 and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Paul as applied to claims 1, 3, 5-7 and 10-12 above, in view of Shultz *et al.* (US 4,921,492).

Paul expressly teaches the claimed invention except for an end effector.

Shultz *et al.* teaches and end effector (12)(figure 5, below).



At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the end effector of Shultz *et al.* to the plume evacuation system of Paul in order to provide a interface for effectively removing debris resulting from laser surgery (see Shultz *et al.* abstract).

Claims 2, 4 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Paul as applied to claims 1, 3, 5-7 and 10-12 above, in view of Goosen (US 5,019,060).

Paul teaches the claimed invention except for a volumetric flow indicator.

Goosen teaches a flow indicator (26)(figure 2, below).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to add the flow indicator of Goosen to the laser plume evacuation system of Paul in order to provide a means of monitoring the flow rate of the system.

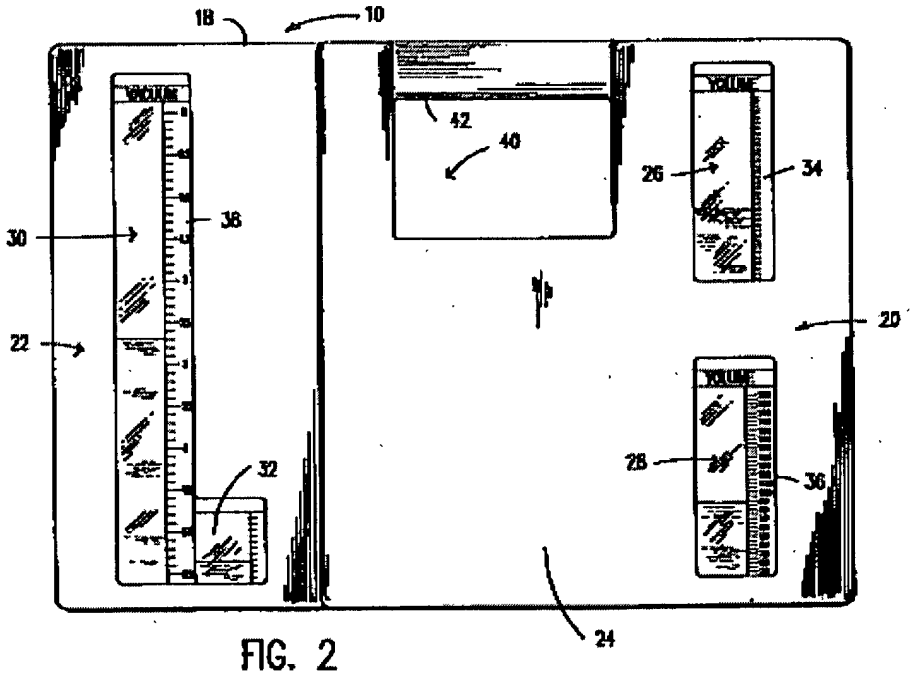


FIG. 2

Regarding claim 8, the references do not disclose an microprocessor-based flow meter.

Merely automating a prior art process is not sufficient to patentably distinguish a claimed invention if no unexpected result can be demonstrated. See *In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958) (Appellant argued that claims to a permanent mold casting apparatus for molding trunk pistons were allowable over the prior art because the claimed invention combined "old permanent-mold structures together with a timer and solenoid which

automatically actuates the known pressure valve system to release the inner core after a predetermined time has elapsed." The court held that broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art.). MPEP § 2144.04. In the instant case, applicants have added electronic calculating means to a flow meter, which can automatically calculate flow rates, etc. This is simply an automation step over the manual calculations which may be performed by the combination of Paul and Goosen.

Claims 14-18 rejected under 35 U.S.C. § 103(a) as being unpatentable over Paul and Shultz *et al.* as applied to claims 9 and 13 above, in view of Goosen.

Paul and Shultz *et al.* teach the claimed invention except for a flow indicator.

Goosen teaches a flow control indicator (26).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to add the flow indicator of Goosen to the laser plume evacuation system of Paul and Shultz *et al.* in order to provide a means of monitoring the flow rate of the system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Bogart whose telephone number is (571) 272-4933.

In the event the examiner is not available, the Examiner's supervisor, Tatyana Zalukaeva may be reached at phone number (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300 for formal communications. For informal communications, the direct fax to the Examiner is (571) 273-4933.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-3700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Bogart
9 August 2005

TATYANA ZALUKAEVA
PRIMARY EXAMINER